

WHAT IS CLAIMED IS

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1. An information processing apparatus
comprising:

10 a plurality of information recording media
respectively having a generally paper shape with an
image display surface for displaying various information,
said image display surface of each of the information
recording media having peripheral portions including a
holding portion and recorded with identification
information in one of the peripheral portions other than
15 the holding portion, said identification information
recorded on each of the information recording media
indicating a storage location of one page of display
image information written on the information recording
medium and prestored in storage means;

20 a holding part which holds the holding portion of
each of the information recording media which are
stacked;

information input means for accepting an input of
various information by handwriting on an arbitrary one
25 of the information recording media which is used as a

writing target;

identification information recognizing means for
recognizing the identification information recorded on
the arbitrary information recording medium which is used
5 as the writing target;

information storing means for storing the various
information accepted by said information input means and
the identification information recognized by said
identification information recognizing means in an
10 information storage medium by linking corresponding
various information and identification information; and

information output means for outputting the various
information stored in the information storage medium
with respect to said storage means which stores various
15 information at storage locations specified in advance
depending on the identification information.

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2. The information processing apparatus as
claimed in claim 1, wherein:

said storage means is formed by an externally
connected computer;

25 said information storing means links the various

information input by handwriting on the arbitrary
information recording medium to the identification
information and stores the various information and the
identification information in the information storage
5 medium after recognizing from the arbitrary information
recording medium by said identification information
recognizing means the identification information which
corresponds one-to-one to one page of a document stored
within the computer; and

10 said information output means transfers the various
information stored in the information storage medium to
the computer to overwrite the various information on
display image information of one page of the document
which corresponds one-to-one, based on the linked
15 identification information.

20 3. The information processing apparatus as
claimed in claim 1, wherein:

 said storage means is formed by the information
storage medium;

 said information storing means links the various
25 information input by handwriting on the arbitrary

information recording medium to the identification
information and stores the various information and the
identification information in the information storage
medium after recognizing from the arbitrary information
5 recording medium by said identification information
recognizing means the identification information which
corresponds one-to-one to one page of a document stored
within the information storage medium; and

10 said information output means transfers the various
information stored in the information storage medium
within the information storage medium to overwrite the
various information on display image information of one
page of the document which corresponds one-to-one, based
on the linked identification information.

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4. The information processing apparatus as
20 claimed in claim 1, further comprising:

additional writing detecting means for detecting a
handwriting input operation on the arbitrary information
recording medium; and

an identification information recognizing operation
25 control means for controlling said identification

information recognizing means to recognize the
identification information based on the handwriting
input operation detected by said additional writing
detecting means.

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5. The information processing apparatus as
10 claimed in claim 1, wherein the identification
information of the arbitrary information recording
medium is recorded on one of the peripheral portions of
the image display surface confronting the holding
portion.

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6. The information processing apparatus as
20 claimed in claim 1, wherein the identification
information of the arbitrary information recording
medium is recorded on one of the peripheral portions of
the image display surface adjacent to the holding
portion.

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7. The information processing apparatus as
claimed in claim 1, wherein the identification
information includes a two-dimensional code, and said
identification information recognizing means includes a
5 two-dimensional code reader.

10 8. The information processing apparatus as
claimed in claim 1, wherein the identification
information includes a one-dimensional code, and said
identification information recognizing means includes a
one-dimensional code reader.

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9. The information processing apparatus as
20 claimed in claim 1, wherein the identification
information is recorded on the arbitrary information
recording medium so as to reflect light in a region
other than a visible region with respect to incident
light having a specific wavelength.

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10. The information processing apparatus as claimed in claim 1, further comprising:

power starting means for starting a power supply when said holding part holds the information recording
5 media.

10 11. An information processing apparatus comprising:

a plurality of information recording media respectively having a generally paper shape with an image display surface for rewritably displaying various
15 information, said image display surface of each of the information recording media having peripheral portions including a holding portion and recorded with identification information in one of the peripheral portions other than the holding portion, said
20 identification information recorded on each of the information recording media indicating a storage location of one page of display image information written on the information recording medium and prestored in storage means;

25 a holding part which holds the holding portion of

each of the information recording media which are stacked;

information input means for accepting an input of various information by handwriting on the information
5 recording media;

additional writing means for additionally inputting desired various information by handwriting on an arbitrary one of the information recording media;

identification information recognizing means for
10 recognizing the identification information recorded on the arbitrary information recording medium which is used as the writing target;

information storing means for storing the various information input by said additional writing means and
15 accepted by said information input means and the identification information recognized by said identification information recognizing means in an information storage medium by linking corresponding various information and identification information; and

20 information output means for outputting the various information stored in the information storage medium with respect to said storage means which stores various information at storage locations specified in advance depending on the identification information.

12. The information processing apparatus as claimed in claim 11, wherein:

said storage means is formed by an externally connected computer;

5 said information storing means links the various information input by handwriting on the arbitrary information recording medium to the identification information and stores the various information and the identification information in the information storage
10 medium after recognizing from the arbitrary information recording medium by said identification information recognizing means the identification information which corresponds one-to-one to one page of a document stored within the computer; and
15 said information output means transfers the various information stored in the information storage medium to the computer to overwrite the various information on display image information of one page of the document which corresponds one-to-one, based on the linked
20 identification information.

25 13. The information processing apparatus as

claimed in claim 11, wherein:

said storage means is formed by the information storage medium;

5 said information storing means links the various
information input by handwriting on the arbitrary
information recording medium to the identification
information and stores the various information and the
identification information in the information storage
medium after recognizing from the arbitrary information
10 recording medium by said identification information
recognizing means the identification information which
corresponds one-to-one to one page of a document stored
within the information storage medium; and

15 said information output means transfers the various
information stored in the information storage medium
within the information storage medium to overwrite the
various information on display image information of one
page of the document which corresponds one-to-one, based
on the linked identification information.

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14. The information processing apparatus as
25 claimed in claim 11, further comprising:

additional writing detecting means for detecting a
handwriting input operation on the arbitrary information
recording medium; and

an identification information recognizing operation
5 control means for controlling said identification
information recognizing means to recognize the
identification information based on the handwriting
input operation detected by said additional writing
detecting means.

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15 15. The information processing apparatus as
claimed in claim 11, wherein the identification
information of the arbitrary information recording
medium is recorded on one of the peripheral portions of
the image display surface confronting the holding
portion.

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25 16. The information processing apparatus as
claimed in claim 11, wherein the identification

information of the arbitrary information recording medium is recorded on one of the peripheral portions of the image display surface adjacent to the holding portion.

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17. The information processing apparatus as
10 claimed in claim 11, wherein the identification information includes a two-dimensional code, and said identification information recognizing means includes a two-dimensional code reader.

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18. The information processing apparatus as
claimed in claim 11, wherein the identification
20 information includes a one-dimensional code, and said identification information recognizing means includes a one-dimensional code reader.

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19. The information processing apparatus as
claimed in claim 11, wherein the identification
information is recorded on the arbitrary information
recording medium so as to reflect light in a region
5 other than a visible region with respect to incident
light having a specific wavelength.

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20. The information processing apparatus as
claimed in claim 11, further comprising:

power starting means for starting a power supply
when said holding part holds the information recording
15 media.

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21. The information processing apparatus as
claimed in claim 1, further comprising:

storing means, formed by the information storage
medium, for storing data;

reading means for reading a first personal
25 identification number recorded on the information

recording medium;

judging means for judging whether or not the first
personal identification number read by said reading
means matches a second personal identification number

5 which is set in advance; and

control means for storing the data in said storing
means when said judging means judges that the first and
second personal identification numbers match.

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22. The information processing apparatus as
claimed in claim 21, wherein said control means stores
15 the data in a region which is within said storing means
and is indicated on the information recording medium.

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23. The information processing apparatus as
claimed in claim 21, further comprising:

fixing means for fixing a first part forming a
peripheral portion of the information recording medium,

25 said reading means reading the first personal

identification number recorded on a second part of the peripheral portion different from the first part.

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24. The information processing apparatus as claimed in claim 1, further comprising:

reading means for reading a first personal
10 identification number recorded on the information recording medium;

judging means for judging whether or not the first personal identification number read by said reading means matches a second personal identification number
15 which is set in advance; and

control means for storing the data in the storage means which is externally connected to the information processing apparatus when said judging means judges that the first and second personal identification numbers
20 match.

25 25. The information processing apparatus as

claimed in claim 21, wherein:

said reading means reads from the information
recording medium document specifying information which
specifies a document stored in the storing means, and

5 said control means overwrites the data with respect
to the document which is specified by the document
specifying information read by said reading means.

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26. The information processing apparatus as
claimed in claim 24, wherein:

15 said reading means reads from the information
recording medium document specifying information which
specifies a document stored in the storing means, and

 said control means overwrites the data with respect
to the document which is specified by the document
specifying information read by said reading means.

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27. The information processing apparatus as
25 claimed in claim 1, wherein:

the information recording medium is recorded with additional writing enable/disable information which indicates whether or not an additional writing is possible with respect to a document which is already
5 recorded on the information recording medium,

said reading means reads the additional writing enable/disable information, and

said control means stores the data in the storing means only when the additional writing enable/disable
10 information read by said reading means indicates that an additional writing is possible.

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28. The information processing apparatus as claimed in claim 24, wherein:

the information recording medium is recorded with additional writing enable/disable information which
20 indicates whether or not an additional writing is possible with respect to a document which is already recorded on the information recording medium,

said reading means reads the additional writing enable/disable information, and

25 said control means stores the data in the storing

means only when the additional writing enable/disable information read by said reading means indicates that an additional writing is possible.

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29. The information processing apparatus as claimed in claim 11, further comprising:

- 10 storing means, formed by the information storage medium, for storing data;
- reading means for reading a first personal identification number recorded on the information recording medium;
- 15 judging means for judging whether or not the first personal identification number read by said reading means matches a second personal identification number which is set in advance; and
- control means for storing the data in said storing
- 20 means when said judging means judges that the first and second personal identification numbers match.

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30. The information processing apparatus as claimed in claim 29, wherein said control means stores the data in a region which is within said storing means and is indicated on the information recording medium.

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31. The information processing apparatus as claimed in claim 29, further comprising:

fixing means for fixing a first part forming a peripheral portion of the information recording medium, said reading means reading the first personal identification number recorded on a second part of the peripheral portion different from the first part.

32. The information processing apparatus as claimed in claim 11, further comprising:

reading means for reading a first personal identification number recorded on the information recording medium;

judging means for judging whether or not the first

personal identification number read by said reading means matches a second personal identification number which is set in advance; and

control means for storing the data in the storage
5 means which is externally connected to the information processing apparatus when said judging means judges that the first and second personal identification numbers match.

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33. The information processing apparatus as claimed in claim 29, wherein:

15 said reading means reads from the information recording medium document specifying information which specifies a document stored in the storing means, and
said control means overwrites the data with respect to the document which is specified by the document
20 specifying information read by said reading means.

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34. The information processing apparatus as

claimed in claim 32, wherein:

said reading means reads from the information recording medium document specifying information which specifies a document stored in the storing means, and

5 said control means overwrites the data with respect to the document which is specified by the document specifying information read by said reading means.

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35. The information processing apparatus as claimed in claim 11, wherein:

the information recording medium is recorded with
15 additional writing enable/disable information which indicates whether or not an additional writing is possible with respect to a document which is already recorded on the information recording medium,

said reading means reads the additional writing
20 enable/disable information, and

said control means stores the data in the storing means only when the additional writing enable/disable information read by said reading means indicates that an additional writing is possible.

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36. The information processing apparatus as claimed in claim 32, wherein:

the information recording medium is recorded with additional writing enable/disable information which indicates whether or not an additional writing is possible with respect to a document which is already recorded on the information recording medium,

said reading means reads the additional writing enable/disable information, and

10 said control means stores the data in the storing means only when the additional writing enable/disable information read by said reading means indicates that an additional writing is possible.

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37. An information recording medium comprising:

20 a member having a generally paper shape and an image display surface for displaying various information; and

identification information recorded in one of peripheral portions of the image display surface other than a holding portion, and indicating a storage

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location of one page of display image information
prestored in storage means.

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38. The information recording medium as
claimed in claim 37, wherein the identification
information reflects light in a region other than a
10 visible region with respect to incident light having a
specific wavelength.

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39. An information recording medium
comprising:

a member having a generally paper shape and an
image display surface for rewritably displaying and
20 maintaining various information; and

identification information recorded in one of
peripheral portions of the image display surface other
than a holding portion, and indicating a storage
location of one page of display image information
25 prestored in storage means.

40. The information recording medium as
claimed in claim 39, wherein the identification
information reflects light in a region other than a
visible region with respect to incident light having a
5 specific wavelength.

10 41. The information recording medium as
claimed in claim 37, further comprising:
a recording layer at least including a leuco dye
and a developer and recorded with a first personal
identification number,
15 said first personal identification number being
read by reading means, and characters being recorded
with respect to said recording layer when the first
personal identification number matches a second personal
identification number which is set in advance.

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42. The information recording medium as
25 claimed in claim 41, wherein the first personal

identification number is rewritable with respect to said recording layer.

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43. The information recording medium as claimed in claim 37, further comprising:

10 a recording layer made of a resin layer including organic compound grains and recorded with a first personal identification number,

15 said first personal identification number being read by reading means, and characters being recorded with respect to said recording layer when the first personal identification number matches a second personal identification number which is set in advance.

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44. The information recording medium as claimed in claim 43, wherein the first personal identification number is rewritable with respect to said recording layer.

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45. The information recording medium as claimed in claim 37, further comprising:

a recording layer including a liquid crystal compound and recorded with a first personal

5 identification number,

said first personal identification number being read by reading means, and characters being recorded with respect to said recording layer when the first personal identification number matches a second personal

10 identification number which is set in advance.

15 46. The information recording medium as claimed in claim 45, wherein the first personal identification number is rewritable with respect to said recording layer.

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47. The information recording medium as claimed in claim 39, further comprising:

25 a recording layer at least including a leuco dye

and a developer and recorded with a first personal
identification number,

5 said first personal identification number being
read by reading means, and characters being recorded
with respect to said recording layer when the first
personal identification number matches a second personal
identification number which is set in advance.

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48. The information recording medium as
claimed in claim 47, wherein the first personal
identification number is rewritable with respect to said
15 recording layer.

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49. The information recording medium as
claimed in claim 39, further comprising:

a recording layer made of a resin layer including
organic compound grains and recorded with a first
personal identification number,

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said first personal identification number being

read by reading means, and characters being recorded with respect to said recording layer when the first personal identification number matches a second personal identification number which is set in advance.

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50. The information recording medium as
10 claimed in claim 49, wherein the first personal identification number is rewritable with respect to said recording layer.

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51. The information recording medium as
claimed in claim 39, further comprising:

a recording layer including a liquid crystal
20 compound and recorded with a first personal identification number,

said first personal identification number being
read by reading means, and characters being recorded
with respect to said recording layer when the first
25 personal identification number matches a second personal

identification number which is set in advance.

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52. The information recording medium as claimed in claim 51, wherein the first personal identification number is rewritable with respect to said recording layer.

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53. An information processing apparatus for generating data corresponding to characters written on an information recording medium, characterized by:

storing means for storing the data;

reading means for reading a first personal identification number recorded on the information recording medium;

judging means for judging whether or not the first personal identification number read by said reading means matches a second personal identification number which is set in advance; and

control means for storing the data in said storing

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means when said judging means judges that the first and second personal identification numbers match.

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54. The information processing apparatus as claimed in claim 53, wherein said control means stores the data in a region which is within said storing means and is indicated on the information recording medium.

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55. The information processing apparatus as claimed in claim 53, further comprising:

fixing means for fixing a first part forming a peripheral portion of the information recording medium,

said reading means reading the first personal identification number recorded on a second part of the peripheral portion different from the first part.

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56. An information processing apparatus for generating data corresponding to characters written on an information recording medium, characterized by:

reading means for reading a first personal
5 identification number recorded on the information
recording medium;

judging means for judging whether or not the first
personal identification number read by said reading
means matches a second personal identification number
10 which is set in advance; and

control means for storing the data in an externally
connected storage means when said judging means judges
that the first and second personal identification
numbers match.

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57. The information processing apparatus as
20 claimed in claim 53, wherein:

said reading means reads from the information
recording medium document specifying information which
specifies a document stored in the storing means, and

said control means overwrites the data with respect
25 to the document which is specified by the document

specifying information read by said reading means.

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58. The information processing apparatus as claimed in claim 56, wherein:

10 said reading means reads from the information recording medium document specifying information which specifies a document stored in the storing means, and
 said control means overwrites the data with respect to the document which is specified by the document specifying information read by said reading means.

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59. The information processing apparatus as claimed in claim 53, wherein:

20 the information recording medium is recorded with additional writing enable/disable information which indicates whether or not an additional writing is possible with respect to a document which is already recorded on the information recording medium,

25 said reading means reads the additional writing

enable/disable information, and

said control means stores the data in the storing
means only when the additional writing enable/disable
information read by said reading means indicates that an
5 additional writing is possible.

10 60. The information processing apparatus as
claimed in claim 56, wherein:

the information recording medium is recorded with
additional writing enable/disable information which
indicates whether or not an additional writing is
15 possible with respect to a document which is already
recorded on the information recording medium,

said reading means reads the additional writing
enable/disable information, and

said control means stores the data in the storing
20 means only when the additional writing enable/disable
information read by said reading means indicates that an
additional writing is possible.

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61. An information processing system for generating and processing data corresponding to characters written on an information recording medium, characterized by:

5 storing means for storing the data;

 recording means for recording a first personal identification number on the information recording medium;

 reading means for reading the first personal
10 identification number which is recorded on the information recording medium by said recording means;

 judging means for judging whether or not the first personal identification number read by said reading means matches a second personal identification number
15 which is set in advance; and

 control means for storing the data in said storing means when said judging means judges that the first and second personal identification numbers match.

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62. An information processing system for generating and processing data corresponding to
25 characters recorded on an information recording medium

which is recorded with print enable/disable information
which indicates whether or not a printing is possible,
characterized by:

recording means for recording the print
5 enable/disable information on the information recording
medium;

reading means for reading the print enable/disable
information which is recorded on the information
recording medium by said recording means; and

10 printing means for printing the characters on the
information recording medium depending on the data when
the print enable/disable information read by said
reading means indicates that the printing is possible.

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63. An information recording medium which
becomes a writing target when generating data
20 corresponding to written characters, characterized by:

a recording layer at least including a leuco dye
and a developer and recorded with a first personal
identification number,

said first personal identification number being
25 read by reading means, and characters being recorded

with respect to said recording layer when the first personal identification number matches a second personal identification number which is set in advance.

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64. An information recording medium which becomes a writing target when generating data
10 corresponding to written characters, characterized by:
a recording layer made of a resin layer including organic compound grains and recorded with a first personal identification number,
said first personal identification number being
15 read by reading means, and characters being recorded with respect to said recording layer when the first personal identification number matches a second personal identification number which is set in advance.

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65. An information recording medium which becomes a writing target when generating data
25 corresponding to written characters, characterized by:

a recording layer including a liquid crystal compound and recorded with a first personal identification number,

5 said first personal identification number being
read by reading means, and characters being recorded
with respect to said recording layer when the first
personal identification number matches a second personal
identification number which is set in advance.

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66. The information recording medium as
claimed in claim 63, wherein the first personal
15 identification number is rewritable with respect to said
recording layer.

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67. The information recording medium as
claimed in claim 66, wherein an optical characteristic
of said recording layer changes reversible with respect
to temperature.

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